UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/859,708	05/17/2001	David M. Shaw	12293-19	4131

50086 7590 09/26/2006

LAW OFFICE OF DAVID H. JUDSON
15950 DALLAS PARKWAY
SUITE 225
DALLAS, TX 75248

EXAMINER	
TAYLOR, NICHOLAS R	
ART UNIT	PAPER NUMBER
2141	

DATE MAILED: 09/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/859,708	SHAW, DAVID M.	
	Examiner	Art Unit	
	Nicholas R. Taylor	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 June 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15,16,18 and 20-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15,16,18 and 20-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 March 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 15, 16, 18, and 20-26 have been presented for examination and are rejected.

Response to Arguments

2. Applicant's arguments filed June 29th, 2006, have been fully considered but they are deemed not persuasive.

3. In the remarks, applicant argued in substance that:

(A) The prior art of Lumelsky fails to disclose the function of creating and caching a stream buffer from a first server, in order to switch a stream from a first to a second server. To illustrate this, applicant cites Lumelsky's description of jitter "smoothing" followed by a portion of the reference where Lumelsky describes the prior art as "unlike the use of catch-up buffers" (col. 7, lines 28-59). Applicant alleges that Lumelsky fails to teach the use of stream buffering.

As to point (A), Lumelsky describes the process of using buffers to "smooth" the arrival of data that may be fragmented from network delays (col. 6, lines 41-47). While mentioning some pitfalls of over-buffering and limited interactivity, Lumelsky describes this technique as "desirable" (col. 6, lines 51-54). Immediately after this introduction, Lumelsky describes how these same buffering techniques are used in the present invention in column 6, line 60 to column 7, line 13 and figure 4. Figure 4 shows Packet

Buffers 230 that cache incoming advanced portions of the media stream that are eventually rendered in Application 200. These buffers are also shown in Packet Buffer Unit 330 of figure 5. If these buffers were not available, the continuous and uninterrupted rendering of the streaming connection would not be possible during network delays.

When Lumelsky describes the invention as "unlike the use the use of catch-up buffers" (col. 7, lines 34-35), a comparison is being made to a prior art switching system that is limited to only providing a lone catch-up buffer. As Lumelsky's teaching does not use a lone catch-up buffer, but integrates and improves on the buffering present in the prior art. For example, Lumelsky later requires that "enough data must be present in the buffers ... so as to allow its smoothing" (col. 7, lines 53-56).

(B) The Lumelsky technique is complicated and requires a synchronizer unit, unlike applicant's disclosure.

As to point (B), in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (e.g., lack of a synchronizing unit) are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 15, 16, 18, and 20-25 rejected under 35 U.S.C. 103(a) as being unpatentable over Goldszmidt et al. (U.S. Patent 6,195,680) and Lumelsky et al. (U.S. Patent 6,377,996).

6. As per claim 15, Goldszmidt teaches an apparatus, comprising:

a processor; a media player; (Goldszmidt, column 5, lines 26-31, and column 8, lines 19-23)

a program code module comprising code executable by the processor to carry out the following method steps:

as a media stream is being received from a first server and rendered by the media player (Goldszmidt, column 5, lines 54-59, and column 8, lines 19-23),

determining whether the media stream is acceptable according to a given metric; (Goldszmidt, column 7, lines 10-45)

if the media stream is not acceptable, and as the media stream continues to be received, taking a given action to initiate delivery of the media stream from a second server;

receiving the media stream from the second server; and (Goldszmidt, column 7, lines 10-45)

when the given offset is reached, rendering in the media player the media stream received from the second server (Goldszmidt, column 8, lines 19-23).

Goldszmidt teaches switching the to the stream on the second server using buffers and advanced portions (Goldszmidt, column 14, lines 11-60), yet fails to specifically teach wherein the given action includes the steps of:

(a) creating a buffer; (b) receiving from the first server and caching in the buffer advanced portions of the media stream; (c) issuing a request to the second server to initiate delivery of the media stream at a given offset; and (d) rendering the advanced portions of the media stream.

Lumelsky teaches switching streaming media streams between a primary and a secondary stream (Lumelsky, column 5, line 55 to column 6, line 7, and figure 2) where a buffer is used to cache the advanced portions of the stream (Lumelsky, column 6, lines 41-59) after a client request to initiate the second stream, and the advanced portion is rendered until the offset is reached (Lumelsky, column 7, lines 27-56).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have combined Lumelsky and Goldszmidt to provide the stream switching of Lumelsky in the system of Goldszmidt, because doing so would enhance the playback to provide a smooth and uninterrupted stream at the client end (Lumelsky, column 6, lines 41-59).

7. As per claim 16, Goldszmidt-Lumelsky teaches the system further wherein the code is executable by the processor to initiate an instruction to the first server to cease

transmission of the media stream before rendering the advanced portions of the media stream (Goldszmidt, column 9, lines 7-23, specifically figure 3a).

8. As per claim 18, Goldszmidt-Lumelsky teaches the system further wherein the code is executable by the processor to match data packets received from the first and second servers such that the media stream rendered in the media player appears continuous (Goldszmidt, column 9, line 61 to column 10, line 5, and column 10, lines 44-48).

9. As per claim 20, Goldszmidt-Lumelsky teaches the system further wherein the media stream is not acceptable if it is being thinned by the first server (Goldszmidt, column 9, lines 7-23).

10. As per claim 21, Goldszmidt-Lumelsky teaches the system further wherein the media stream is not acceptable if a given indication from the first server is received (Goldszmidt, column 7, lines 10-45).

11. As per claim 22, Goldszmidt-Lumelsky teaches the system further wherein the given indication is that the first server will be unavailable (Goldszmidt, column 7, lines 10-45).

12. As per claim 23, Goldszmidt-Lumelsky teaches the system further wherein the code executable by the processor determines that the second server has a response time that differs from a response time of the first server (Goldszmidt, column 10, lines 6-19).

13. As per claim 24, Goldszmidt-Lumelsky teaches the system further wherein the code executable by the processor determines whether the media stream is acceptable periodically as the media stream is being delivered (Goldszmidt, column 9, lines 7-23).

14. As per claim 25, Goldszmidt-Lumelsky teaches the system further wherein the code executable by the processor records given data associated with receipt of the media stream (Goldszmidt, column 5, lines 33-49).

15. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldszmidt et al. (U.S. Patent 6,195,680) and Lumelsky et al. (U.S. Patent 6,377,996), further in view of Ravi et al. (U.S. Patent 6,292,834).

16. As per claim 26, Goldszmidt-Lumelsky teaches the above, yet fails to teach wherein the advanced portions of the media stream are created by instructing the first server to increase a delivery rate of the media stream or by instructing the media player to decrease a rendering rate of the media stream.

Ravi teaches modifying media stream delivery rates in order to keep an advanced portion buffer at an optimal capacity (Ravi, col. 6, lines 32-62).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have combined Goldszmidt-Lumelsky and Ravi to provide the 2 of Goldszmidt-Lumelsky in the system of Ravi, because doing so would improve the reliability and efficient transmission of streams from servers to clients while efficiently using network resources (Ravi, col. 2, lines 64-67).

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Taylor whose telephone number is (571) 272-3889. The examiner can normally be reached on Monday-Friday, 8:00am to 5:30pm, with alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3718.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nicholas Taylor
Examiner
Art Unit 2141

RUPAL DHARIA
SUPERVISORY PATENT EXAMINER